

**WHAT IS CLAIMED IS:**

1. A method of producing purified papillomavirus virus – like particles (VLPs), comprising:
  - (i) purifying disassembled papillomavirus virus-like particles (VLPs); and
  - (ii) reassembling said disassembled papillomavirus like particles (VLPs) from step (i) to produce purified papillomavirus virus – like particles (VLPs).
2. The method of Claim 1 wherein said VLPs are human papillomavirus VLPs.
3. The method of Claim 2 wherein said human papillomavirus VLPs are selected from the group consisting of HPV-6, HPV-11, HPV-16, HPV-18, HPV-30, HPV-31, HPV-33, HPV-35, HPV-39, HPV-41, HPV-42, HPV-43, HPV-44, HPV-45, HPV-52, HPV-54, HPV-55, HPV-56, HPV-58, HPV-70, and mixtures thereof.
4. The method of Claim 3 wherein said human papillomavirus VLP is an HPV-16 VLP.
5. The method of Claim 1 wherein said disassembled papillomavirus virus like particles are produced by contacting a papillomavirus virus-like particle (VLP) containing composition with a solution comprising at least one sulfhydryl reducing agent for a time sufficient to disassemble said VLPs into smaller L1 protein containing molecules and/or mutated and/or chemically altered forms of L1 protein.
6. The method of Claim 5 wherein said papillomavirus VLPs include one or more of L1 proteins, mutated L1 proteins, and chemically altered L1 proteins; and include L2 proteins.
7. The method of Claim 5 wherein reassembly of said disassembled papillomavirus virus-like particles is induced by removal or oxidation of said sulfhydryl reducing agent.